

Project Number: RO1 CA71125-03
Project Title: Home Care for Fever and Neutropenia: A Randomized Trial
Principal Investigator: Ann M. Hendricks, Ph.D.

Background/Rationale:

Febrile neutropenia is the leading cause of emergency hospital admission for cancer patients. Traditionally, these patients have been treated with broad-spectrum, high-dose intravenous antibiotics in the hospital until both fever and neutropenia have resolved. More recently, both the desires of patients for time at home and economic pressures to shorten inpatient stays have led some physicians to improve outpatient therapy for some of these patients. However, while home IV therapy is technically feasible, treating patients at home may be risky because it is much harder to identify and treat medical problems in a home setting.

Objectives:

To assess the use of home IV antibiotic therapy for cancer patients who would otherwise be treated in the hospital. The CHQOER team is responsible for collecting and analyzing data on the costs of treatment for both the inpatient and home arms of the trial.

Methods:

Oncology patients were recruited into the trial upon admission to the hospital for febrile neutropenia and assessment to determine their being at low risk according to the criteria developed in the pilot study. Half were randomized to the home arm of the study and discharged with a care assigned to the home health agency contracting with the study. Patients were eligible for the study regardless of their insurance coverage for home treatments. Patients completed questionnaires on background information, quality of life, and daily measurements of blood pressure, temperature, and expenditures or visits for medical care. A short log of informal caregivers' time was maintained. Other cost information was obtained from study nurses or from provider records.

Findings/Results:

The final enrollment includes 119 patients. The home arm is less costly than the inpatient arm, but by less than \$1,000 per episode, considerably less than expected.

Impact:

The standard of care for oncology patients with febrile neutropenia is changing. This project is the only source of rigorous data on the safety and cost differences from these changes.